

ABSTRACT

There is provided a transmission means (3) configured to transmit a modulated signal obtained by modulating data, a transmission electrode (8) that induces an electric field based on the modulated signal in an electric field transmission medium (20), a first reactance means (2) that is provided between the electric field transmission medium (20) and an earth ground (14) and configured to cause resonance with parasitic capacitance produced between a ground (6) the transmission means (3) and the earth ground (14), parasitic capacitance produced between the electric field transmission medium (20) and the ground (6) of the transmission means (3) and parasitic capacitance produced between the electric field transmission medium (20) and the earth ground (14), and a second reactance means (1) provided between an output of the transmission means (3) and the ground (6) of the transmission means (3) or between the transmission electrode (8) and the ground (6) of the transmission means (3).